DOCUMENT RESUME

ED 437 695 CS 510 221

AUTHOR McDevitt, Michael; Chaffee, Steven
TITLE Closing Gaps in Political Knowledge: Effects of a School Intervention via Communication in the Home.
PUB DATE 2000-02-00
NOTE 41p.; Paper presented at the Annual Meeting of the Western States Communication Association (71st, Sacramento, CA, February 25-29, 1999).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Communication Research; Family Involvement; Intermediate Grades; *Mass Media Use; *News Media; *Parent Child Relationship; *Parent Participation; *Political Socialization; Secondary Education; *Socioeconomic Status
IDENTIFIERS *Political Communication

ABSTRACT

A model of family influence that reverses the traditional roles of parents and children is presented to explain the results of a school intervention that narrowed political communication and knowledge gaps between parents of high and low socioeconomic status (SES). Students' exposure to a civics curriculum stimulated adolescent news media use at home and discussions with parents about an ongoing election campaign. These discussions, in turn, stimulated parents to pay more attention to news and to gain political knowledge. Students in grades 5-12 and one parent of each family were interviewed in a quasi-experimental evaluation of the civics curriculum (N=457 pairs). Parents in low-SES homes had not been strongly socialized to politics in their own youth, but their children's exposure to the school intervention provided them a "second chance" at citizenship. This study highlights the capacity of the child to stimulate political communication in low-SES families. Contains 49 references, and 4 tables and 2 figures of data. Appendixes contain 2 additional tables of data. (Author/RS)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 437 695

# Closing Gaps in Political Knowledge: Effects of a School Intervention via Communication in the Home

Michael McDevitt and Steven Chaffee

Western States Communication Association,
Sacramento, California

February 2000

Correspondence:

Michael McDevitt
Assistant Professor
Department of Communication & Journalism
Communication & Journalism Building
Room 235 West
University of New Mexico
Albuquerque, NM 87131-1171
505-277-1204; fax: 505-277-4206
mcdevitt@unm.edu

Michael McDevitt is an assistant professor in the Department of Communication & Journalism at the University of New Mexico

Steven Chaffee is a professor in the Department of Communication at the University of California, Santa Barbara.

CS 510 221

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
M. McDevitt
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

## Abstract

A model of family influence that reverses the traditional roles of parents and children is presented to explain the results of a school intervention that narrowed political communication and knowledge gaps between parents of high and low socioeconomic status. Students' exposure to a civics curriculum stimulated adolescent news media use at home, and discussions with parents about an ongoing election campaign. These discussions, in turn, stimulated parents to pay more attention to news and to gain political knowledge. Students in grades 5-12 and one parent of each family were interviewed in a quasi-experimental evaluation of the civics curriculum (N=457 pairs). Parents in low-SES homes had not been strongly socialized to politics in their own youth, but their children's exposure to the school intervention provided them a "second chance" at citizenship. This study highlights the capacity of the child to stimulate political communication in low-SES families.

## Closing Gaps in Political Communication and Knowledge: Effects of a School Intervention

Decades of studies on political participation have led to minimal expectations for interventions designed to cultivate equality in citizenship through increased diffusion of knowledge. In 1947, Hyman and Sheatsley concluded that a substantial proportion of the U.S. population consisted of "chronic know-nothings," people who neither know nor care about public affairs and who appear satisfied to remain in that condition. Field interventions typically fail to arouse people of low socioeconomic status (Tichenor, Rodenkirchen, Olien, and Donohue, 1973), and surveys consistently show that SES is strongly related to knowledge – along with virtually every indicator of political involvement, including attention to news, discussion about public affairs, and voting (Brady, Verba, & Schlozman, 1995).

While knowledge is thought to provide the basis for competence in normative conceptions of participatory democracy, the "knowledge gap" literature suggests that public information campaigns will tend to exacerbate the problem of stratified citizenship. Prior research has documented conditions under which gaps close (Gaziano, 1997; Viswanath & Finnegan, 1996), but the hypothesis as originally formulated would predict that persons already interested in politics will gain the most from an election campaign or an intervention specifically designed to stimulate citizenship (Moore, 1987).

This dismal scenario extends to the children of adults who appear impervious to political activation. The culture of poverty seems to entail a culture of political disengagement as parents reproduce in their children behavioral patterns that scholars interpret as persistent knowledge gaps (Drew & Reeves, 1980; Gollin & Anderson, 1980).

This study provides a more hopeful view of the capacity for interventions to stimulate political interest, communication, and knowledge within previously disengaged families. While low-SES adults are difficult to engage via mass media campaigns – particularly when the topic is politics – schools provide an alternative channel to reach them indirectly, through their children. For parents who have lived most of their lives uninterested in public affairs, the political stimulation provided by their children might provide for them a second chance at citizenship.

Relying on students to stimulate the involvement of parents represents a counter-intuitive intervention strategy given the widespread assumption of top-down influence in political socialization and related research (Jennings & Niemi, 1974; Niemi & Hepburn, 1995). This literature has scarcely acknowledged the possibility of adolescent influence on parent political involvement. Nevertheless, students constitute a captive audience for schools, and thus are easier to reach than their parents. Under a scenario of "trickle-up" influence, students exposed to a civics program at school would bring their enthusiasm home to parents, initiating discussion that would increase the motivation for parents to pay attention to news during an electoral campaign.

*Tracing the Origins of Knowledge Gaps*

Our evaluation of a school-based intervention in terms of family communication represents one of the few studies that have sought to model knowledge gap phenomena by way of primary-group interaction (Gaziano, 1984). It is the first attempt at explaining the rate of parent knowledge acquisition as a function of child-initiated discussion during an election campaign. This study consequently departs from prior research on the knowledge gap hypothesis, which has tended to focus on macro-structural or micro-individual processes (Viswanath & Finnegan, 1996).

Tichenor and his colleagues posed the knowledge gap hypothesis as a macro-social process: "As the infusion of mass media information into a social system increases, segments of the

population with higher socioeconomic status tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease" (Tichenor, Donohue, & Olien, 1970). Structural approaches effectively predict diffusion of knowledge but do not necessarily specify communication mechanisms by which SES makes a difference in micro-social settings such as school, work, and family. Scholars subsequently identified other variables, such as interest in news and motivation, to account for individual differences within a particular stratum (Ettema & Kline, 1977; Genova & Greenberg, 1979). But researchers have tended to retain an assumption that these individual-level traits are fixed orientations. People do not, in fact, behave as isolated individuals in the processing and use of political information; they are located in social networks, and it is through primary groups that increased interest in news is periodically generated (Kanihan & Chaffee 1996).

Viswanath and Finnegan (1996) suggest that future research on the role of interpersonal discussion in narrowing gaps might advance theorizing on the relationships between macro and micro processes. The model of curriculum effects presented here describes the family as mitigating the influence of social structural institutions such as schools and mass media, which can stimulate individuals' discussion and knowledge gain within the context of family interaction. A primary-group model thereby suggests a theoretical bridge across levels of analysis.

The flow of influence outlined in Figure 1 represents an ambitious intervention strategy given that parents are presumed to be never directly exposed to the school-based curriculum. Findings are based on a quasi-experimental evaluation of an intensive curriculum taught to students in San Jose, California, during the election campaign of 1994. The main independent variable is a student's exposure to the civics program, which is examined for its direct impact on the student and its indirect effect on parent knowledge via student-parent discussion.

– INSERT FIGURE 1 HERE –

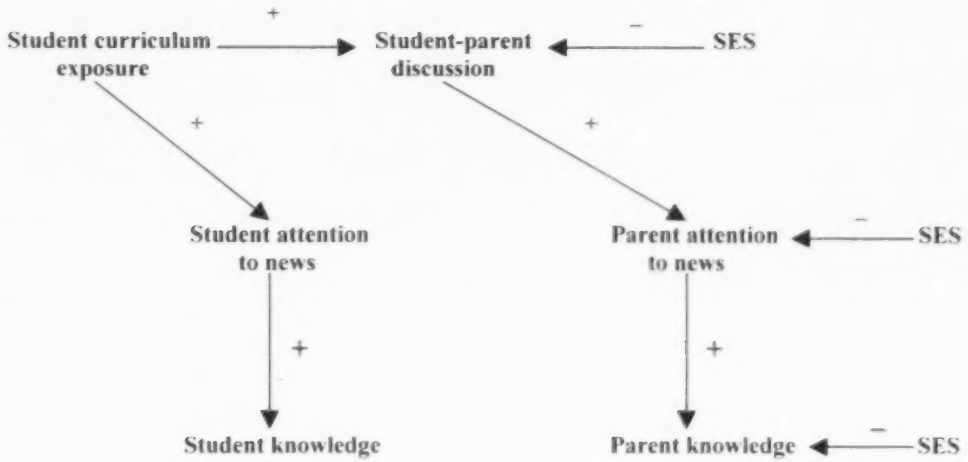
While social structure is usually conceptualized as a barrier to the widespread diffusion of political interest, low-SES parents have the most to gain in terms of knowledge, and in the model presented here, their response to politicized children would result in a narrowing of the knowledge gap. In Figure 1, this is represented by the negative signs associated with SES for the parent behaviors. Low socioeconomic status tends to be associated with less likelihood of family discussion of politics, and with less individual attention to news, but a school intervention might overcome these structural limitations. Figure 1 also illustrates why the curriculum's impact is likely to be greater on students than on their parents, and on communication behavior than on public affairs knowledge, the final link in a chain of events the school experience sets in motion.

*Curriculum Effects on Students*

Designers of the intervention evaluated here envision the school as an organized setting for the practice and development of skills important to citizenship. The empirical literature, however, does not provide much encouragement for such interventions. Overviews conclude that there is little correlation between variation in number of civics courses taken and longitudinal indicators of political socialization (Riccards, 1973; Patrick, 1977).

While researchers have documented only modest knowledge gains when schools rely on standard, didactic teaching in civic courses, schools possess institutional attributes that potentially allow them to function as training grounds for citizenship (Dewey, 1916/66). Schools can provide a formal setting for students to practice opinion expression and peer discussion, and they can offer incentives for learning about civic affairs. Attention to political information in school and exposure to news media should be greater when a young person perceives that political information is useful for school assignments and conversations (Kanihan & Chaffee, 1996; Atkin, 1981).

**Figure 1. Paths of Curriculum Influence on Student and Parent Knowledge of Politics**



The general expectation is that an intensive curriculum would stimulate political communication of the child outside the immediate school setting, reflected in increased attention to news and discussion with parents. A student's increased news attention should lead directly to knowledge about an electoral campaign, while family discussion should stimulate a parent's interest in the campaign. This study incorporates three measures of adolescent and parent media use: frequency of newspaper reading, frequency of TV news viewing, and attention to news.

A curriculum that seeks to activate information seeking outside the classroom must overcome the presumed tendency for adolescents to ignore politics (Bennett, 1997, 1998), but prior studies have shown that when teenagers perceive a benefit to being informed, they turn to newspapers (Atkin, 1981). Research has also demonstrated considerable adolescent viewing of TV news during political campaigns, and those who pay attention learn a lot about candidates and issues (Chaffee, Ward, & Tipton, 1970; Chaffee & Schleuder, 1986). In comparison with habitual media consumption, attention to news is a more accurate operationalization of motivated acquisition of knowledge (Chaffee & Schleuder, 1986). Particularly for television news, questions about "attention" to public affairs are better predictors of learning than are items asking about frequency of mere exposure.

In the literature of political socialization, the prospect of children initiating political discussion in the family is rarely acknowledged (McDevitt & Chaffee, 1998), but it is reasonable to expect that exposure to political stimulation, whether at school or via media use, would be associated with motivation to engage in political conversations. Students might thereby function in their families as "opinion leaders" in a process reminiscent of the "two-step flow" (Lazarsfeld, Berelson, & Gaudet, 1944).

We summarize these expectations in the first hypothesis:

*H1a*: A student's exposure to a civics curriculum will lead to increases in student-parent discussion and to increases in the student's frequency of newspaper reading, frequency of TV news viewing, attention to campaign news, and election knowledge.

Higher-SES adolescents read public affairs news more frequently than youth from disadvantaged families (Drew & Reeves, 1980; Gollin & Anderson, 1980), and the gap widens with age as differential socialization processes take hold. The San Jose intervention intended to override demographic barriers so that students in all families would develop the habit of paying more attention to news and discussing public affairs. We anticipate that the very lack of predispositions for political engagement within low-SES families would increase their potential for responding to a civics curriculum, and thus our prediction is opposite to that of the knowledge gap hypothesis. Information and activities provided in the classroom, along with discussion outside school prompted by the intervention, may have been experienced by low-SES students as particularly novel stimulation.

*H1b*: Curriculum effects will be stronger among low-SES students than among high-SES students.

*Effects of Child Discussion on Parents*

While interventions to stimulate citizenship and diffusion of political knowledge generally focus on individuals instead of the family as a social unit (McDevitt & Chaffee, 1998), several large-scale health interventions have successfully used schools to promote behavioral change among both students and parents (Crawford, Jason, Riordan, Kaufman, Salina, Sawalski, Chu Ho, & Zolik, 1990; Goodman & Goodman, 1976). In this study, a school curriculum is conceptualized as a trigger for intra-family processes, even though parents were not directly exposed to the intervention. Prior research shows that parent-adolescent discussion about politics is infrequent (Jennings & Niemi, 1974; Hawkins, Pingree, Smith, & Bechtolt, 1979), but a campaign can make politics a salient topic for family discussion (Sears & Valentino, 1996).

Once stimulated by family discussion, a parent's newfound interest in politics might become evident in increased frequency of news media use (Ettema & Kline, 1977).

*H2a*: Student curriculum exposure will lead to increases in the parent's newspaper reading, TV news viewing, attention to campaign news, and election knowledge.

*Second Chance at Citizenship*

For the sequence of influence to occur as described in Figure 1, resulting in increased acquisition of parents' knowledge, the intervention would need to overcome media-use habits prevalent among low-SES adults. Less educated people rely on television instead of newspapers, and while some scholars have argued that TV exposure has the potential to narrow gaps (Robinson, 1972; Tichenor et al., 1970), individuals tend to acquire information more efficiently from print media (Kleinnijenhuis, 1991. Furthermore, highly educated people have an advantage in the processing and retention of news content (Converse, 1975; Price & Zaller, 1993).

Research documenting cases in which gaps narrow point to the importance of motivation as an individual difference more consequential than SES in accounting for knowledge (Ettema & Kline, 1977; Genova & Greenberg, 1979). But other studies have shown that motivation tends to be correlated with socioeconomic status (Viswanath, Kahn, Finnegan, Hertog, & Potter, 1993). In fact, motivation and education combine to create even greater gaps.

Taken together, these findings provide a dismal outlook on the potential for an information campaign to narrow knowledge gaps. However, a developmental framework helps to explain how low-SES parents' interaction with children might provide them with heightened motivation to gain knowledge. Developmental research documents changes in patterns of family interaction, focusing on "important landmarks" in an adult's life that bring about new role demands (Sigel & Hoskin, 1977). In the case of low-SES parents, political socialization during their own youth might not have

prepared them for competent interactions with their adolescent children. These adults, however, have not decided purposely to opt out of citizenship. Their disengagement is *inadvertent*, an indirect result of career decisions that involved personal concerns more pressing than politics. When their children go to school, a "second chance" for political engagement might occur.

Living in a family, in fact, entails a degree of political contagion (Sigel & Hoskin, 1977; Straits, 1990). Married people are more likely to vote than similar individuals who are single, separated, or divorced (Wolfinger & Rosenstone, 1980). People with little autonomous political motivation may well respond to political stimuli from those with whom they have continuing daily relationships. Glaser (1969) found that if a family member has a weak inclination to vote, the presence of another family member who has a similarly weak tendency nevertheless raises the possibility that both will vote. But researchers have left unexplored the potential for the child to politicize the family, as if scholars had decided that children should be seen but not heard in theories of political activation.

A highly educated parent is not likely to experience a child's discussions about politics as novel stimulation, but in low-SES homes, such discussions might be more consequential in motivating a parent to pay attention to political news, and perhaps gain knowledge for the purpose of subsequent discussion with the student.

*H2b*: Curriculum effects on parents will be stronger in low-SES families than in high-SES families.

*H2a* and *H2b* embody two sequential processes in that parents' increased attention to news and subsequent knowledge gain would occur *indirectly*, due to the stimulation of students' political interest at school and consequent discussion with parents. While we expect students to initiate political communication in the home, family interaction is characterized by reciprocal influence in behaviors such as discussions about candidates, co-viewing of news, and sharing of newspapers.

With the failure of scholars to acknowledge the child's active role in political socialization, the relationship of family-based discussion to political involvement is usually understood in terms of husband-wife interactions (Stoker & Jennings, 1995; Beck, 1991; Straits, 1991). Family discussion appears to be the key process by which spouses eventually develop similarities in their levels of political knowledge, media use, and formal participation (Jennings & Niemi, 1971). This compatibility of political involvement supports the conceptualization of the family as a social unit in which reciprocal influence might nurture the political interests of both children and parents, even though only one member of a family might have formal contact with an intervention.

*H3a*: The curriculum will indirectly account for increases in parent attention to news and knowledge via stimulation of student-parent discussion.

*H3b*: The intervening effect of student-parent discussion on parent knowledge will be stronger in low-SES families than in high-SES families.

**Methods**

Our study began as an evaluation of an innovative school curriculum, although in our analyses we cannot with certainty attribute our findings solely to this specific intervention. During the fall campaign of 1994, nearly one-half of the schools in San Jose implemented a civics curriculum developed by *Kids Voting USA*. A non-profit organization based in Tempe, Arizona, *Kids Voting* has developed a series of lesson plans and suggested activities dealing with voting in a democracy. Preceding an election held in early November, the curriculum is taught for at least six weeks from the start of a school year.

In the curriculum developed for San Jose schools, teachers provided instruction in how a person registers to vote; how to organize information for electoral decisions; how to find out the positions of different candidates on issues; and why political parities are formed. The curriculum

was participatory in nature; teachers and community volunteers provided activities that allowed students to practice skills of citizenship. In the classroom, students dissected political advertisements; analyzed rival positions of candidates; studied ballot propositions; and took sides in debates about campaign issues. Outside the classroom, students participated in their own convention ("Kidsvention") and cast ballots in a mock voting exercise.

While we could not randomly assign students to classrooms, to a considerable extent the educators of San Jose in effect did. The fact that only about half of the schools participated in *Kids Voting* was unfortunate for the sponsors but fortuitous for the study design, allowing for comparisons among families based on the extent of student exposure to the curriculum. Some teachers used the *Kids Voting* curriculum regularly; others only parts of it. The evaluation of the program was somewhat confounded by the fact that some teachers used similar instructional strategies without relying directly on the *Kids Voting* materials, and many used only a fraction of the *Kids Voting* lessons. But for the purpose of the present analysis this added stimulation of students simply adds to the variation available for study. This particular study is not intended to assess the specific impact traceable to one instructional source; the purpose is to examine how school-based stimulation extends into the family – stimulation that any intensive educational experience of this nature might set in motion.

We assume that families not exposed to the *Kids Voting* curriculum did receive some political stimulation during the fall of 1994. All the students and parents surveyed were probably exposed in some degree to the campaign and news coverage. Attention to a political campaign tends to be positively correlated with SES, so this normal background effect would work against our gap-closing hypotheses. Descriptive statistics for a curriculum exposure scale, demographic indicators, and measures of communication behaviors are presented in Appendix Table 1.

*Independent variable correlates*. Assignment to independent variable conditions is randomized by the investigator in a fully controlled experiment. The control possible in a "laboratory" setting, however, is not feasible in most field-evaluations of educational programs. Evaluation usually entails quasi-experimentation (Cook & Campbell, 1979), where selection to contrasting conditions is unbiased but not literally randomized. For this study, a student's exposure to the curriculum should be independent of personal choice. The distribution of students on a curriculum exposure scale should not be predictable on the basis of student or family characteristics. Regression analysis in Appendix Table 2 shows that participation in the curriculum was, in fact, unrelated to differences in socioeconomic status, school grades, gender, ethnicity, or year in school. Overall, the design meets the criteria of a quasi-experiment, if not a field experiment in the more controlled sense of that term. Selection biases in terms of student or parent decisions pose virtually no threat to inferences we might draw about curriculum effects.[1]

*Sampling and study design*. Our goal was to gather data from a representative sample of families in San Jose that included a student in any grade from 5th through 12th; the design called for interviews with one student and one parent, randomly sampled, within each family. A sample of families was created from information provided by a commercial firm that specializes in market research on adolescents. The company started from a roster of households available from focus group work, and extended that list through referrals to other families with school children. This provided 490 pairs of names of parents and children. A student and a parent in each family were interviewed by telephone during the three weeks beginning the day after the election. The student and parent were interviewed separately, and interviewers were instructed to discourage parents and children from assisting each other with responses. The final sample consists of N=457 families in which interviews were completed with both one student and one parent.[2]

*Interviewing methods.* Pre-election in-person interviews with paper-and-pencil questionnaires were used to pre-test all questions, except those that could not sensibly be asked until after the election. The post-election collection of data was conducted by computer-assisted telephone interviewing (CATI). Interviewers were supervised by the project staff.

*Curriculum exposure.* Interviewers did not know in advance whether, or to what extent, a student had participated in a special civics curriculum. While *Kids Voting* staff kept records on schools that implemented the curriculum, the extent of use in each classroom varied. This made it necessary during interviews to measure exposure to the main independent variable rather thoroughly. The student questionnaire included a series of items designed to trigger the student's recall of *Kids Voting* and kindred experiences at school. Questions asked near the end of the student interview provided items for a summed scale measuring curriculum exposure. Each student was asked what had been taught in school during the fall; these items described major components of the model *Kids Voting* curriculum. An additional item asked about the frequency of discussion of the election campaign in class. In factor analysis involving other, more specialized curriculum features, five dichotomous items and the classroom discussion item formed a single main factor. These were combined to form an ordinal scale, which serves as the independent variable. The six items include:

"Do you remember being taught how to find out where to go to vote?"
"Do you remember being taught how to gather information before voting?"
"Do you remember being taught about who is eligible to vote in the U.S., and who is not?"
"Do you remember being taught why some people organize themselves into political parties?"
"Do you remember being taught materials from *Kids Voting* in school this fall?"
"Using the 1-to-5 scale again, how much was the election discussed in your classes at school?"

The five dichotomous items were coded 0-1, and when combined with the discussion item, formed a 10-point scale that was roughly normally distributed. The alpha coefficient of internal

consistency is .67, not a surprisingly low figure given that the curriculum lessons were quite different from one another. A given teacher probably chose to use those lessons that fit with the course in which they were used, and those that matched the teacher's instructional style.

*Validity.* Questions can be raised about the validity of curriculum effects given that most of the criterion variables are based on self-reports of political behavior. While the set of criterion variables do include knowledge tests, claims about both political involvement and curriculum exposure might be inflated by demand characteristics of the interview. A general upward bias in self-described recall might not affect correlations across an entire sample, though, in that adding a constant to everyone's score would not affect correlation coefficients. Social desirability could be correlated with other attributes of respondents, however. This problem of inference can be largely offset by demographic variables used as controls in multiple regression.

Concern about the validity of curriculum effects is also alleviated by the use of behavioral measures for the students, and by testing effects on parents. The adolescent respondents – not their parents – were asked about participation in a curriculum; indeed, we had no evidence that parents were especially aware of the civic lessons their children were receiving at school. The questionnaire design thus reduces the possibility that statistical associations between curriculum exposure and parent behaviors would occur as a measurement artifact.

*Criterion Measures of Political Involvement*

Indicators of political involvement were essentially the same for students and parents, although some items required slight differences in wording.

*Frequency of student-parent discussion.* A summed two-item scale measured the frequency of a student's political discussion with the interviewed parent.

(Student) "Still using the 1-to-5 scale, how often did you talk about the campaign and the election with your [parent]? Remember, 1 means never and 5 very often." Coded: 5=5; 4=4; 3=3; 2=2; 1, no answer (NA), don't know (DK)=1.
(Parent) "Still using the 1-to-5 scale, how often did you talk about the campaign and the election with your [child]? Remember, 1 means never and 5 very often."

The correlation between these two self-report items is .43, a fairly high convergence considering the restricted variance on a single-item measurement of a dyad member.

While this is a criterion measure with respect to the political stimulation of the student, it is a necessary condition for any subsequent influence on the parent, as diagramed in Figure 1. Student-parent discussion is thus a process variable in terms of the eventual acquisition of parental knowledge.

*Newspaper reading.* A summed three-item scale measured frequency of reading newspapers. Responses were coded: yes=1; no, NA, DK=0.

"Do you usually read the front page news?"
"Do you sometimes read opinion columns on the editorial page?"
"Do you sometimes read letters to the editor?"

The internal consistency (alpha) was .54 for students and .78 for parents. Along with reflecting random response error, the lower reliability for adolescent newspaper use compared to adult reading might reflect a lack of crystallization of this habit among youth. Students might have developed a practice of reading part of the paper but not all of it on a consistent basis.

*TV news viewing.* A two-item scale measured the amount of TV news viewing; item scores were multiplied to create the scale.

"About how many days a week do you watch a news program, such as the evening news or the late evening news, on television?" Coded: 7 days=7; 6 days=6; 5 days=5; 4 days=4; 3 days=3; 2 days=2; 1 day=1; 0, none, NA, DK=0.
"Is news something you try to watch on TV, or do you just see it because someone else has it on?" Try to watch=3; both=2; it's just on, NA, DK=1.

The correlation between the two items was .47 for students and .48 for parents.

*Attention to news*. A summed four-item scale measured amount of attention paid to political news. Respondents used a 1-5 scale, with 1 representing "none" and 5 "a lot." Coded: 5=5; 4=4; 3=3; 2=2; 1, NA, DK=1.

"How much attention did you pay to news about the national government in Washington, D.C.?"
"In the recent election, how much attention did you pay to news about the candidates for major offices like Governor of California and U.S. Senator?"
"And during the election campaign, how much attention did you pay to news stories about the ballot propositions?"
"How about ads on TV? How much attention did you pay to ads the candidates were running on television?"

Alpha was .74 for students and .79 for parents.

*Election knowledge*. A summed thirteen-item scale measured knowledge of the election.

"Do you remember if Proposition 187 passed or not?" Coded: passed=2; did not pass=0; NA, DK=1.
"Do you remember who won the election for governor? Was it Pete Wilson or Kathleen Brown?" Wilson=2; Brown=0; NA, DK=1.
"Do you happen to know who won the election for Governor in Texas? Was it Ann Richards or George W. Bush?" Bush=2; Richards=0; NA, DK=1.
"And who won the election for U.S. Senator in Massachusetts? Was it Ted Kennedy or Mitt Romney?" Kennedy=2; Romney=0; NA, DK=1.
"Which two of these people were the Republican candidates: Brown, Feinstein, Huffington or Wilson?" Huffington, Wilson=2; Brown, Feinstein=0; NA, DK=1.
"Which two of these people opposed Proposition 187, to restrict public services for illegal immigrants in California: Brown, Feinstein, Huffington or Wilson?" Brown, Feinstein=2; Huffington, Wilson=0; NA, DK=1.
"Which one was accused in TV ads of being a Texas millionaire Californians can't trust? Was it Brown, Feinstein, Huffington, or Wilson?" Huffington=2; Brown, Feinstein, Wilson=0; NA, DK=1.
"Which one was accused in TV ads of being a career politician, who is driven to work in a limousine?" Feinstein=2; Brown, Huffington, Wilson=0; NA, DK=1.
"Which one's father and brother were both governors of California?" Brown=2; Feinstein, Huffington, Wilson=0; NA, DK=1.
"Which one used to be the mayor of San Diego?" Wilson=2; Brown, Feinstein, Huffington=0; NA, DK=1.
"Do you know which one sponsored a law to create several new national parks in the deserts of Southern California?" Feinstein=2; Brown, Huffington, Wilson=0; NA, DK=1.

Alpha was .74 for students and .78 for parents.

*Demographic variables*. Several demographic variables were used in multiple regression tests of the effects of the curriculum on students. These included the student's year in school (grade), gender, and (combining answers from student and parent) course grades in school. The parent was asked about the family's ethnic identity, and an index of socioeconomic status was based on family income plus the parent's number of years of education. Item wording and coding for these variables is included in the appendix. The analysis of curriculum effects on students consists of hierarchical regression that controls first for these variables. The purpose of these variables is not literally "control" because all of them are uncorrelated with the main independent variable. But they provide a point of comparison for evaluating the strength of curriculum effects. Demographic variables were used as well in a path analysis of indirect curriculum effects on parents. These variables include SES, ethnicity, and parent gender.

**Results**

The first hypothesis states that a student's curriculum exposure will account for increases in student-parent discussion of the campaign and increases in a student's information seeking. Results are summarized in Table 1. The block of demographic indicators include variables that have been used in prior research to predict levels of political involvement among adolescents. Family SES and ethnicity, along with the student's age, grades in school and gender, are entered first in multiple hierarchical regression. The remainder of the analysis provides an assessment of the curriculum in terms of its ability to account for variance beyond that attributed to the demographic factors.

– INSERT TABLE 1 HERE –

Table 1 shows that the curriculum accounted for significant amounts of incremental variance in all of the criterion measures. However, the relative strength of the intervention can be

Table 1

*Effects of Curriculum on Student Dependent Variables (Multiple Hierarchical Regression)*[a]

| Dependent variable | r | Demographics $R^2$ | Curriculum $R^2$ Change | Total $R^2$ | Curriculum Beta |
|---|---|---|---|---|---|
| Student-parent discussion | .31*** | .07*** | .06*** | .14*** | .26*** |
| Newspaper reading | .28** | .05** | .05*** | .10*** | .22*** |
| TV news viewing | .17** | .04** | .02** | .06*** | .13** |
| Attention to news | .53** | .09*** | .15*** | .24*** | .39*** |
| Election knowledge | .22** | .28*** | .01* | .29*** | .08 |

a. The first column reports the correlation (r) between curriculum exposure and the dependent variable. The $R^2$ in the second column refers to the amount of variance accounted for by the demographic variables, which were entered simultaneously in the first equation of hierarchical regression. Curriculum $R^2$ change indicates the amount of incremental variance attributed to curriculum exposure, which was entered in the second equation. Total $R^2$ refers to variance attributed to the combination of curriculum exposure and demographic variables. The final column reports the curriculum beta generated by the second equation.

*p<.05. **p<.01. ***p<.001. (N=457)

assessed in relation to the block of demographic variables, which for three out of the five criterion variables accounted for more variance than curriculum exposure. Mere participation in the curriculum, consequently, did not overshadow other factors in the students' lives that had previously influenced the propensity for responding to an election campaign.

Despite these predispositional factors, the curriculum did account for substantial amounts of incremental variance for attention to new. The variance attributed to curriculum exposure for news attention greatly outstrips variance accounted for by all of the demographic variables combined. The impact of the curriculum on students' newspaper reading is far greater than on TV news viewing, however. This finding is consistent with experiments showing that students do not modify their TV habits appreciably, but do consult the newspaper more often following an experience that encourages information seeking (Atkin, 1972; Kanihan & Chaffee, 1996).

The effectiveness of the intervention as a stimulus for trickle-up influence is suggested most directly by the dyadic indicator of student-parent discussion. Curriculum exposure accounted for about the same amount of variance as all demographic variables combined.

Table 2 provides corresponding support for *H1b*, that curriculum effects will be more pronounced among low-SES students than among high-SES students. An SES-by-curriculum interaction term was created after computing standardized scores for the two scales. The two-stage hierarchical regression accounts first for variance due to the main effects of the curriculum and SES, and then for incremental variance attributable to the interaction. With respect to the main effects, the betas for curriculum exposure were stronger than the SES betas for all five of the criterion variables. Meanwhile, the negative interaction betas support an interpretation of the data that the curriculum interacted with SES to narrow gaps between high- and low-status students for several communication behaviors. These include student-parent discussion, TV news viewing, and

attention to news. For election knowledge, the beta for the interaction term is negative but not statistically significant. While the amount of variance attributed to the multiplicative terms is modest, the results show a consistent tendency for low-SES students to benefit more than middle-class students do from the intervention.[3]

– INSERT TABLE 2 HERE –

*H2a* and *H2b* predict that the curriculum will account for significant variance in the indicators of parent political involvement, and these effects will be stronger among the low-SES families. Table 3 is directly analogous to Table 2 except that the indicators for student behavior have been replaced with the parallel measures of parent behavior. (The results for student-parent discussion are repeated in Table 3). In the first equation, Table 3 reveals considerable influence of the curriculum on attention to news. While the betas for habitual media use and knowledge do not reach statistical significance, they are all positive. The strongest effect occurs with student-parent discussion, which will be examined in a subsequent analysis to trace the curriculum's indirect influence on parent knowledge via this interpersonal channel.

Increased frequency of family discussion demonstrates that the curriculum directly affected adolescent-parent interaction, but perhaps more interesting are changes in the other parent behaviors. In response to a politically activated child, a parent appears to be attending to news more diligently, and in the case of low-SES homes, gaining more knowledge from it.

– INSERT TABLE 3 HERE –

Table 3 shows that the SES-by-curriculum interaction produced a significant increment to variance in each of our criterion measures. The interaction betas are uniformly negative, indicating a pattern of gap-narrowing across the various indicators of parent political involvement. Notably, these interaction effects are stronger for parents than are those for students in Table 2. Taken

Table 2

*Interaction Effects of SES and Curriculum on Student Dependent Variables (Multiple Hierarchical Regression)*

| | Block 1: | | | Block 2: | |
|---|---|---|---|---|---|
| | SES | Curriculum | | SES x Curriculum | |
| Dependent variable | Beta | Beta | $R^2$ | Change in $R^2$ | Beta |
| Student-parent discussion | .14** | .29*** | .14*** | .02** | -.15** |
| Newspaper reading | .09* | .27*** | .09*** | .00 | .00 |
| TV news viewing | .09* | .17*** | .04*** | .01* | -.10* |
| Attention to news | .13** | .51** | .30*** | .01** | -.11** |
| Election knowledge | .18*** | .21*** | .08*** | .01 | -.08 |

*p<.05. **p<.01. ***p<.001. (N=457)

Table 3
*Interaction Effects of SES and Curriculum on Parent Dependent Variables (Multiple Hierarchical Regression)*

| | Block 1: | | | Block 2: | |
|---|---|---|---|---|---|
| | SES | Curriculum | | SES x Curriculum | |
| Dependent variable | Beta | Beta | $R^2$ | Change in $R^2$ | Beta |
| Student-parent discussion | .14** | .29*** | .14*** | .02** | -.15** |
| Newspaper reading | .30*** | .05 | .10*** | .03*** | -.18*** |
| TV news viewing | .18** | .03 | .04*** | .01* | -.10* |
| Attention to news | .30** | .18** | .13*** | .06*** | -.26*** |
| Election knowledge | .39*** | .02 | .15*** | .02** | -.14*** |

*p<.05. **p<.01. ***p<.001. (N=457)

together, the curriculum effects on students and their parents suggest that the intervention clearly stirred things up in low-SES homes.

We return now to the indirect flow of influence as described in Figure 1 and the role of student-parent discussion in parents' knowledge gain. *H3a* states that student-parent discussion will account for variance in parent knowledge via increased attention to news. Our expectation is that the curriculum did not have a direct effect on parent attention to news or knowledge gain, but exerted its influence through the stimulation of student-parent discussion. A path analysis was constructed to evaluate this model. As an extension of multiple regression, path analysis itself cannot establish causality, but it can demonstrate the pattern of relationships among multiple variables given an assumption of direct and indirect effects. Our causal inferences here rely on the quasi-experimental induction of student political behaviors, including student-parent discussion, which we have already tested in Tables 1 and 2.

Adhering to the structural relationships illustrated in Figure 2, a series of multiple regression equations generated results presented as a trimmed path model. SES, family ethnicity, and parent gender represent exogenous factors that might help to account for a parent's level of knowledge. Consistent with prior research on predictors of political behavior, these demographic variables are associated with knowledge in the path model. Influence from the curriculum proceeds from the direct stimulation of student-parent discussion to a parent's increased news attention to knowledge gain. As Figure 2 shows, the curriculum had no direct effect on parent attention to news nor on knowledge, demonstrating that its impact on parents occurred indirectly through student-parent interaction.

– INSERT FIGURE 2 HERE –

**Figure 2. Trimmed Path Model Predicting Influence of Curriculum on Parent News Attention and Knowledge**

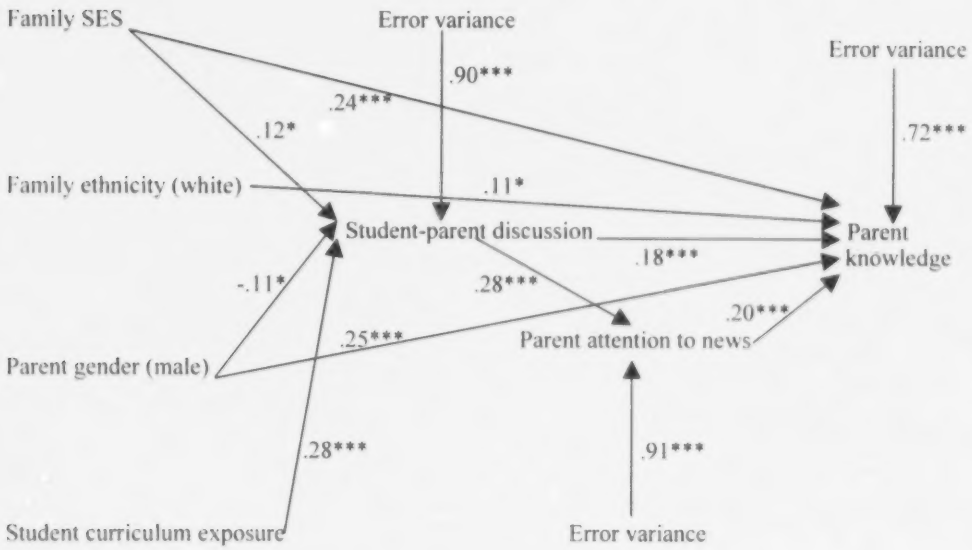


Figure 2 shows that student-parent discussion, which is mainly a product of the school curriculum, in turn exerted both a direct effect on parent knowledge and an indirect effect on knowledge through a parent's attention to news. While the results suggest that discussions could have directly informed parents about candidates, student-parent discussion might also provide a general motivation among parents for acquiring information on their own, making discussion an overall stronger predictor of knowledge gain than news attention. Our decomposition of direct and indirect effects in Figure 2 suggests that both processes were at work to some extent.

Path analysis assumes a causal priority among variables such that influence flows in one direction. While some researchers have proposed a reciprocal relationship between discussion and use of news media (Chaffee, 1982), parent-child discussion about politics tends to occur infrequently in most homes in the absence of an intervention or unusual circumstance (Atkin, 1981). Given the demonstrated effects of the school-based intervention, the model described here assigns a causal priority to student-parent discussion as a stimulus to parent media use. The path analysis shows that the curriculum generated student-parent discussion but had no separable direct effect on parent media use, which supports our contention that it was increased frequency of discussion in the home that led to the parent's heightened attention to news. Prior field experimental research also indicates that an unusual increase in political discussion within a primary group provides motivation for increased media use (Kanihan & Chaffee, 1996).

The key finding we would like to highlight in Figure 2 is that student-parent discussion exerts an indirect effect on parental knowledge by stimulating the parent's attention to news. Although student-parent discussion is not common, when it occurs as a consequence of a strong curriculum intervention, it has important consequences that go beyond the student and the school.

This result is mindful of the "strength of weak ties" principle, that an infrequent interpersonal connection can, when activated, lead to a major change in a person's life (Granovetter, 1973).

The final hypothesis states that the influence of student-parent discussion on parent knowledge will be more pronounced in low-SES homes than in high-SES homes. We tested this in hierarchical regression in which demographic variables are entered in the first equation, followed by parent media use and discussion in the second equation, and an SES x discussion interaction term in the final equation. Table 4 shows that among the demographic variables, SES is a strong predictor of parent knowledge; gender (male) also accounts for significant variance but with these factors controlled ethnicity does not. In the second equation, attention to news is a much stronger predictor than is the frequency of newspaper reading or TV news viewing, and importantly, discussion with the student has a separate, statistically significant effect. *H3b* is supported in the third equation, with the SES x student-parent discussion interaction term generating a negative beta and significant incremental variance in parent knowledge.

– INSERT TABLE 4 HERE –

**Discussion**

This study contributes to knowledge gap theory by highlighting the capacity of the young student to stimulate political communication in a low-SES family. The results supported the contention that a school-based curriculum would prompt student-parent discussion at home, and would increase a student's newspaper reading, TV news viewing, attention to campaign news, and election knowledge. These effects were strongest among low-SES students, demonstrating the capacity of the intervention to narrow not only the knowledge gap, but gaps in other communication behaviors important to the development of citizenship in young people.

Table 4

*Effects of Student Discussion on Parent Knowledge of Election (Multiple Hierarchical Regression)* [a]

| Predictors | Eq. 1 Beta | Eq. 2 Beta | Eq. 3 Beta |
|---|---|---|---|
| **Demographics** | | | |
| SES | .26*** | .21*** | .21*** |
| Family Ethnicity | | | |
| White | .12 | .07 | .09 |
| Hispanic/black | .08 | .01 | .02 |
| Parent gender (male) | .22*** | .23*** | .23*** |
| $R^2$ change | .15*** | | |
| **Parent behaviors** | | | |
| Use of media | | | |
| Newspaper reading | | .08 | .08 |
| TV news viewing | | .01 | .01 |
| Attention to news | | 16** | .16** |
| Student-parent discussion | | .14** | .14** |
| $R^2$ change | | .07*** | |
| **SES x student-parent discussion** | | | -.12** |
| $R^2$ change | | | .02** |
| Total $R^2$ | | | .24*** |

a. Cell entries are beta weights. Change in $R^2$ indicates the amount of incremental variance attributed to each equation.
*p<.05. **p<.01. ***p<.001. (N=457)

The curriculum's indirect influence extended to effects on parents, who were also stimulated in that they increased their newspaper reading, TV news viewing, attention to campaign news, and election knowledge. Consistent with the pattern among students, low-SES parents gained the most from the intervention, resulting in a narrowing of SES-based gaps in the communication behaviors. A subsequent analysis of curriculum influence demonstrated that increases in parents' attention to news and knowledge occurred via the stimulation of student-parent discussion. The effect of discussion on parent knowledge was strongest in low-SES families. In aggregate, these results provide support for our model of indirect curriculum influence, in which a parent's knowledge acquisition is at least partially a product of family interaction initiated by students.

Our results provide a hopeful view of the capacity for low-SES families to become interested in politics when students motivate parents to acquire knowledge. Prior research, by contrast, would suggest at most a minor role for children as initiators of political communication. Adolescents would hardly seem capable of stimulating parents' interest in politics given survey evidence that young people are increasingly indifferent to public affairs (Bennett, 1998). Bennett, in fact, has sought to explain "Why young Americans hate politics" (1997). And even if an optimist might not be surprised about an intervention's success in the political engagement of low-SES families, the process by which this occurs would be difficult to predict if one adhered to assumptions about top-down influence in the parent-child dyad.

The view that stratified citizenship is inevitable – and that interventions are futile – derives from three interrelated assumptions that are deeply rooted in academic thinking and all too easily accepted as common sense. We have found exceptions to each of these beliefs.

*1. Once a person reaches adulthood, patterns of political interest and media use persist* (Converse, 1962; Verba, Schlozman, & Brady, 1995). In the fall of 1994, however, parents in San

Jose were clearly stimulated to pay more attention to news in response to their newly politicized offspring. This scenario of trickle-up influence might constitute a second chance at civic involvement for parents who were not strongly socialized to politics in their own youth.

*2. A "know-nothing" stratum consists of parents and children who are impervious to political activation.* The concept of political alienation is grounded in an archaic mass society model of anonymous individuals who are chronically disengaged from public life (Mills, 1956; Hyman & Sheatsley, 1947). In the case of a school-based intervention, predispositions stemming from parental education would allow high-SES students to gain the most. The opposite occurred in this study, supporting the view that gaps originate from *differences* in exposure rather than information-processing *deficits* (Ettema & Kline, 1977). Once stimulated by students, parents were not stubbornly resistant to political involvement.

*3. Political influence flows downward from parents to children.* A hierarchical arrangement of society is presumed in much of the literature on political behavior and media effects. Scholars locate most societal problems near the bottom of the ladder, usually among the poor or the young. This top-down perspective implies solutions in which institutions such as families, schools, and media are called on to reform people. But parents in this study were indirectly stimulated by a curriculum to which only their children were exposed. This result flies in the face of the assumption that political influence flows unidirectionally downward from parents in the age hierarchy.

*Linking Levels of Analysis*

Inferences from these results should be tempered with the recognition that the findings stem from a single study, which can be characterized as an after-only field quasi-experiment. But the results suggest that the micro-environment of family interaction can help to account for citizenship

gaps detected at the level of social structure, and that the child might play an important role in politicizing otherwise disengaged families. The complexity of this process requires an explicit linking of different levels of analysis involving social structure, the family as a primary group, and individual behavior within the family. Failure to establish links across levels of analysis represents a long-standing problem of theory development in political communication (Pan & McLeod, 1991). With respect to the knowledge gap, dichotomous thinking has tended to divide the literature into social structural or individual approaches.

Because of the restricted media-use habits of low-SES parents and their infrequent participation in political discussion inside and outside the home, these adults are thought to be disengaged from the flow of political communication provided by macro-level institutions such as news media and school systems. But when an adolescent participates in an intensive civics curriculum, the student might act as a conduit, connecting the family to a more politicized environment. The family itself, rather than individuals in isolation to each other, responds to macro-level factors such as increased flow of political communication during an election campaign. While knowledge gaps are often observed as social-structural phenomena and measured as individual-level behavior, much of what stimulates a person toward political involvement occurs as shared experiences within families. A primary-group model situates an individual in a social context that mediates effects of outside agencies, thereby suggesting linkages among the different levels of analysis.

*Limitations and Future Research*

For both students and parents, the statistical tests isolate rather small amounts of variance accounted for by the curriculum-by-SES interactions beyond the variance attributed to the main effects of the two variables. Such modest results are to be expected when an intervention that

occupies only a few hours a week for a few weeks is in effect pitted against the pervasive constraints on people's development associated with social structure. The statistically significant gap-closing effect detailed in Table 4 is a remarkable finding considering that the bulk of theory and research to date would predict the opposite, and that the process operates through the chain of events outlined in Figure 1. This process requires not just one behavioral change, but a sequence of student and parent activities that must overcome longstanding predispositions. While we should be cautious in the interpretation of these results, the consistency of the gap-narrowing trend is impressive in that the pattern involves a wide range of political communication behaviors. And we have accumulated evidence of the interaction effects despite the somewhat restricted SES variance in the student-parent sample.

The approach to studying knowledge acquisition in terms of primary-group interaction highlights the need for research on how gaps might close in response to stimulated discussion in families, peer groups, and workplace settings. Relying on individual and macro-structural levels of analysis, scholars have identified contingent conditions under which gaps might narrow, such as when a topic appeals to less educated people, conflict generates concern throughout the community, and community structure is homogenous (Viswanath & Finnegan, 1996). A theoretical focus on primary-group dynamics suggests the following hypotheses: Gaps are likely to narrow when the topic (a) is discussed frequently in families, (b) the topic stimulates shared use of media, and (c) knowledge is functional for developmental goals such as an adolescent's desire to express opinions or a parent's need to "keep up" with maturing children.

*Implications for Interventions*

Reducing gaps in political knowledge can be accomplished by identifying people within primary groups who are most likely to trigger communication and increased interest in news.

Within low-SES families, parents are not likely to play this role given their restricted social networks and media use habits. And adults with a long history of disengagement are not receptive to direct appeals to their sense of civic duty. In contrast, a civics curriculum has the potential to reach all students, mitigating structural disparities that lead to differential information exposure at home. But while the training of citizens is often understood as a task shared by schools, media, and families (Jennings & Niemi, 1974), how the three institutions interact in political mobilization has not been well understood. What does seem apparent from previous research is that they are largely ineffective as agents of political activation when operating in isolation to each other. These institutions "have much to gain from realization of their independence" (McLeod, Eveland, & Horowitz, 1995, p. 2).

The success of the curriculum intervention in San Jose schools suggests a high potential for reform that takes seriously the ideal of equality in citizenship. Schools can help families to realize their potential as a resource for political involvement – upward as well as downward between generations.

**Appendix**

Item wording for the demographic variables is reported here.

*Year in school*. A single item determined year in school: (Student) "What grade are you in?" Coded: 5th grade=1; 6th=2; 7th=3; 8th=4; 9th=5; 10th=6; 11th=7; 12th=8; NA, DK=4.

*School grades*. A summed, two-item scale measured student grades: (Student) "Would you say your grades are better than average, or below average – or are your grades about average?" below average=1; about average=2; better than average=3; NA, DK=1. Following a screening question to determine which kind of grading system is used in the student's school, the parent was asked one of the following: "Would you say [student] gets mostly As, mostly Bs, mostly Cs, or grades lower than C?" lower than C=1; mostly Bs=5; mostly As=7; NA, DK=0. "Would you say [student] usually gets average grades compared to other students in the school, above average, or below average?" below average=2; average=4; above average=6; NA, DK=0.

*Student and parent gender*. The interviewer determined the respondent's gender. Dummy coded (male=1).

*Family SES.* A two-item scale measured family socioeconomic status based on the parent's report of education and income. Standardized values for each item were computed by subtracting the mean from the coded value and dividing by the standard deviation. The standardized scores were then summed. "How many years of formal schooling have you completed since graduating from high school?" 0=12; 1=13; 2=14; 3=15; 4=16; 5=17; 6=18; 7=19; 8 to 16=20; else=11. "For statistical purposes, we need to estimate people's household income before tax. I'm going to read you some categories of household income. Please stop me when I reach the category that fits you." less than $20,000=1; $20,000-$40,000=2; $40,000-$60,000=3; $60,000-$80,000=4; $80,000-$100,000=5; above $100,000=6; won't say, NA, DK=0.

*Ethnicity.* An item asked parents to describe their ethnic background. Dummy variables were created for the most common groups named. "What is your primary ethnic background? For example, would you describe yourself as white, Chicano, African-American, Asian-American, or some other term that you prefer to use to describe your ethnic background?" white, Caucasian, American, Italian-American, Irish-American, etc.=Dummy 1; Hispanic, Hispanic-American, Chicano, Chicano-American, black, African-American, Native American=Dummy 2; Asian, Asian-American, Korean, Vietnamese, Filipino, East Indian=Dummy 3. The few remaining "other" cases comprised Dummy 4.

– INSERT APPENDIX TABLE 1 HERE –

– INSERT APPENDIX TABLE 2 HERE –

**Notes**

1. School district officials and individual teachers decided whether to use all or part of the *Kids Voting* curriculum, and thus the choice to participate was independent of a student's or a parents' preference. A given student's exposure to the curriculum should be due to decisions made by schools and teachers; this would be functionally equivalent to random assignment by the investigator, and would eliminate selection bias as an alternative explanation for apparent effects of the program. Fortunately for the design of the study, no demographic differences existed between students who were highly or minimally exposed to the curriculum activities (Appendix Table 2). That is, variance in exposure to *Kids Voting* appeared to be near-random, the results of centralized decisions made by school principals and teachers to use all, some, or none of the curriculum.

2. A local market research firm that specializes in adolescent focus groups was engaged to develop a roster of families with students in grades 5 through 12. We directed the firm, Nichols Research, to interview a randomly selected parent, and to secure both agreement for a post-election interview, and permission to interview a randomly selected child. The firm then interviewed the child to arrange a post-election interview. This pre-interview procedure yielded N=490 parent-student pairs; each of the 980 persons had agreed in October to be interviewed in November. With respect to the November interviews, differential attrition occurred due to cooperation, mobility, and availability of respondents in different socio-economic levels.

3. These results raise a question about measurement ceiling as an explanation for the closing of gaps. Did lower-SES students catch up for some measures simply because higher-SES students could not go much higher on those scales? This possibility was examined by comparing means of

"high SES, high curriculum exposure" students (N=124) with the range of scores for each dependent variable. The means did not approach the upper range of possible scores. The same pattern was evident in the parent indicators.

**References**


Atkin, C. (1972). Anticipated communication and mass media information-seeking. *Public Opinion Quarterly, 36,* 188-199.

Atkin, C. (1981). Communication and political socialization. In D. Nimmo & K. Sanders (Eds.), *Handbook of political communication* (pp. 299-328). Beverly Hills, CA: Sage.

Beck, P. A. (1991). Voters' intermediation environments in the 1988 presidential contest. *Public Opinion Quarterly, 55,* 371-394.

Bennett, S. E. (1997). Why young Americans hate politics, and what we should do about it. *PS: Political Science & Politics, 30,* 47-52.

Bennett, S. E. (1998). Young Americans' indifference to media coverage of public affairs. *PS: Political Science & Politics, 31,* 535-541.

Brady, H. E., Verba, S., & Schlozman, K. L. (1995). Beyond SES: A resource model of participation. *American Political Science Review, 89,* 271-294.

Chaffee, S. H. (1982). Mass media and interpersonal channels: Competitive, convergent, or complementary? In G. Gumpert & R. Cathcart (Eds.), *Inter/media: Interpersonal communication in a media world* (pp. 57-77). New York: Oxford University Press.

Chaffee, S. H., & Schleuder, J. (1986). Measurement and effects of attention to media news. *Human Communication Research, 13,* 76-107.

Chaffee, S. H., Ward, S., & Tipton, L. (1970). Mass communication and political socialization. *Journalism Quarterly, 47,* 647-659.

Converse, P. E. (1962). Information flow and the stability of partisan attitudes. *Public Opinion Quarterly, 26,* 578-599.

Converse, P. E. (1975). Public opinion and voting behavior. In F. Greenstein & N. Polsby (Eds.), *Handbook of political science* (Vol. 4, pp. 75-169). Reading, MA: Addison-Wesley.

Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings.* Chicago: Rand-McNally.

Crawford, I., Jason, L. A., Riordan, N., Kaufman, J., Salina, D., Sawalski, L., Chu Ho, F., & Zolik, E. (1990). A multimedia-based approach to increasing communication and the level of AIDS knowledge within families. *Journal of Community Psychology, 18,* 361-373.

Dewey, J. (1916/66). *Democracy and education.* New York: Free Press.

Drew, D. G., & Reeves, B. B. (1980). Children and television news. *Journalism Quarterly, 57,* 45-54, 115.

Ettema, J. S., & Kline, F. G. (1977). Deficits, differences, and ceilings: Contingent conditions for understanding the knowledge gap. *Communication Research, 4,* 179-201.

Gaziano, C. (1984). Neighborhood newspapers, citizen groups and public affairs knowledge gaps. *Journalism Quarterly, 16,* 556-566, 599.

Gaziano, C. (1997). Forecast 2000: Widening knowledge gaps. *Journalism & Mass Communication Quarterly, 74,* 237-264.

Genova, B. K. L., & Greenberg, B. S. (1979). Interest in news and the knowledge gap. *Public Opinion Quarterly, 43*, 79-91.

Glaser, D. A. (1969). The family and voting turnout. *Public Opinion Quarterly, 23*, 563-570.

Gollin, A., & Anderson, T. (1980). *America's children and the mass media*. New York: Newspaper Advertising Bureau.

Goodman, B., & Goodman, N. (1976). Effects of parent orientation meetings on parent-child communication about sexuality and family life. *The Family Coordinator, 25*, 285-290.

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology, 78*, 1360-1380.

Hawkins, R., Pingree, S., Smith, K., & Bechtolt, W. (1979). Adolescents' responses to issues and images. In S. Kraus (Ed.), *The great debates: Carter vs. Ford, 1976* (pp. 368-383). Bloomington: Indiana University.

Hyman, H. H., & Sheatsley, P. B. (1947). Some reasons why information campaigns fail. In D. Katz, D. Cartwright, S. Eldersveld, & A. McClung Lee (Eds.), *Public opinion and propaganda* (pp. 522-531). New York: Henry Holt.

Jennings, M. K., & Niemi, R. G. (1971). The division of political labor between mothers and fathers. *American Political Science Review, 65*, 69-82.

Jennings, M. K., & Niemi, R. G. (1974). *The political character of adolescence: The influence of families and schools*. Princeton, NJ: Princeton University Press.

Kanihan, S., & Chaffee, S. H. (1996). *Situational influence of political involvement on information seeking: A field experiment*. Paper presented at the Association for Education in Journalism and Mass Communication, Anaheim, CA.

Kleinnijenhuis, J. (1991). Newspaper complexity and the knowledge gap. *European Journal of Communication, 6*, 499-522.

Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1944). *The people's choice*. New York: Duell, Sloan, & Pearce.

McDevitt, M., & Chaffee, S. H. (1998). Second chance political socialization: "Trickle-up" effects of children on parents. In T. J. Johnson, C. E. Hays, & S. P. Hays (Eds.), *Engaging the public: How government and the media can reinvigorate American democracy* (pp. 57-66). Lanham, MD: Rowman and Littlefield.

McLeod, J. M., Eveland, W. P., & Horowitz, E. M. (1995). *Learning to live in a democracy: The interdependence of family, schools, and media*. Paper presented at the Association for Education in Journalism and Mass Communication, Washington, D.C.

Mills, C. W. (1956). *The power elite*. New York: Oxford University Press.

Moore, D. W. (1987). Political campaigns and the knowledge gap hypothesis. *Public Opinion Quarterly, 51*, 186-200.

Niemi, R., & Hepburn, M. A. (1995). The rebirth of political socialization. *Perspectives on Political Science, 24*, 7-16.

Pan, Z., & McLeod, J. M. (1991). Multilevel analysis in mass communication research. *Communication Research, 18*, 140-173.

Patrick, J. (1977). Political socialization and political education in schools. In S. Renshon (Ed.), *Handbook of political socialization* (pp. 190-222). New York: Free Press.

Price, V., & Zaller, J. (1993). Who gets the news? Measuring individual differences in likelihood of news reception. *Public Opinion Quarterly, 57*, 133-164.

Riccards, M. (1973). *The making of the American citizenry: An introduction to political socialization*. New York: Chandler.

Robinson, J. P. (1972). Mass communication and information diffusion. In F. G. Kline & P. J. Tichenor (Eds.), *Current perspectives in mass communication research* (pp. 71-93). Beverly Hills, CA: Sage.

Sears, D., & Valentino, N. A. (1996). Politics matters: Political events as catalysts for preadult socialization. *American Political Science Review*, *91*, 45-65.

Sigel, R. S., & Hoskin, M. B. (1977). Perspectives on adult political socialization – areas of research. In S. A. Renshon (Ed.), *Handbook of political socialization: Theory and research* (pp. 259-293). New York: Free Press.

Stoker, L., & Jennings, M. K. (1995). Life-cycle transitions and political participation: The case of marriage. *American Political Science Review*, *89*, 421-433.

Straits, B. C. (1990). The social context of voter turnout. *Public Opinion Quarterly*, *54*, 64-73.

Tichenor, P. J., Donohue, G. A., & Olien, C. N. (1970). Mass media flow and differential growth in knowledge. *Public Opinion Quarterly*, *34*, 159-170.

Tichenor, P. J., Rodenkirchen, J. M., Olien, C. N., & Donohue, G. A. (1973). Community issues, conflict, and public affairs knowledge. In P. Clarke (Ed.), *New models for mass communication research* (pp. 45-79). Beverly Hills, CA: Sage.

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.

Viswanath, K., & Finnegan, J. R. (1996). The knowledge gap hypothesis: Twenty-five years later. In B. R. Burleson (Ed.), *Communication yearbook 19* (pp. 187-228). Thousands Oaks, CA: Sage Publications.

Viswanath, K., Kahn, E., Finnegan, J. R., Hertog, J., & Potter, J. D. (1993). Motivation and the knowledge gap: Effects of a campaign to reduce diet-related cancer risk. *Communication Research*, *20*, 546-563.

Wolfinger, R. E., & Rosenstone, S. J. (1980). *Who votes?* New Haven: Yale University Press.

Appendix Table 1
*Descriptive Statistics for Student and Parent Variables*[a]

| Measure | # Items | Range | Mean | St. dev. |
|---|---|---|---|---|
| Demographics | | | | |
| Student year in school | 1 | 1-08 | 4.39 | 2.27 |
| Student grades | 2 | 0-10 | 7.78 | 1.97 |
| Student gender (male) | 1 | 0-01 | .50 | .50 |
| Parent gender (male) | 1 | 0-01 | .48 | .50 |
| SES | 2 | st. scores | -.05 | 1.60 |
| White | 1 | 0-01 | .77 | .42 |
| Hispanic/Black | 1 | 0-01 | .10 | .30 |
| Asian | 1 | 0-01 | .06 | .23 |
| Curriculum exposure | 6 | 1-10 | 6.20 | 2.75 |
| Dependent variables | | | | |
| Student-parent discussion | 2 | 2-10 | 5.17 | 1.89 |
| Student newspaper reading | 3 | 0-03 | .87 | .92 |
| Parent newspaper reading | 3 | 0-03 | 2.10 | 1.07 |
| Student TV news viewing | 2 | 0-21 | 5.86 | 5.70 |
| Parent TV news viewing | 2 | 0-21 | 12.51 | 6.71 |
| Student attention to news | 4 | 4-20 | 11.50 | 3.37 |
| Parent attention to news | 4 | 4-20 | 13.70 | 2.93 |
| Student election knowledge | 13 | 0-26 | 15.81 | 4.21 |
| Parent election knowledge | 13 | 0-26 | 22.62 | 3.46 |

a. Frequencies of items that comprise the scales are available upon request to the first author. (N=457)

Appendix Table 2
*Effects of Demographics on Exposure to Curriculum (Multiple Regression)*

| Predictors | r | Beta |
|---|---|---|
| Year in school | .02 | .02 |
| School grades | -.01 | -.01 |
| Student gender (male) | -.06 | -.06 |
| Family SES | .02 | .03 |
| Ethnicity (dummies) | | |
| White | .04 | .06 |
| Hispanic/black | .07 | .10 |
| $R^2$ | | .01 |

(N=457)